

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. (Currently Amended)      A method comprising:  
  
    obtaining a plurality of attribute specifications, each of said attribute specifications including an attribute name and an attribute type;  
  
    identifying an ordering of said attribute specifications;  
  
    updating said attribute specifications according to said identified order; and  
  
    generating a permutation of said plurality of attribute specifications.
  
2. (Original)    The method according to claim 1, wherein said generating further comprises:  
  
    grouping said plurality of attribute specifications into type groups, each of said type groups containing at least one attribute of same said attribute type;  
  
    associating each of said type groups with a corresponding type size; and  
  
    sorting said type groups in an descending order based on the value of said corresponding type size.
  
3. (Original)    The method according to claim 2, wherein said associating further comprises:  
  
    determining said corresponding type size for a type group; and

assigning said corresponding type size to said type group.

4. (Original) The method according to claim 3, wherein said determining includes:

obtaining said corresponding type size from a set of pre-defined primitive type sizes if the attribute type of said type group is a primitive type;

extracting a plurality of internal attribute specifications from said type group if the attribute type of said type group is a non-primitive type, each of said internal attribute specifications including an attribute name and an attribute type; and

generating a permutation of said plurality of internal attribute specifications; and computing said corresponding type size of said type group by counting the total number of bytes occupied by said permutation of said plurality of internal attribute specifications.

5. (Original) The method according to claim 4, wherein said set of pre-defined primitive type sizes includes the type size definitions of C++.

6. (Original) The method according to claim 4, wherein said set of pre-defined primitive type sizes includes the type size definitions of Java.

7. (Currently Amended) A medium having information recorded thereon, such that when said information is read and executed by a computer, the computer is caused to:

obtain a plurality of attribute specifications, each of said attribute specifications including an attribute name and an attribute type;

identify an ordering of said attribute specifications;

update said attribute specifications according to said identified order; and

generate a permutation of said plurality of attribute specifications.

8. (Original) The medium of claim 7, wherein said information recorded on said medium further causes said computer to:

group said plurality of attribute specifications into type groups, each of said type groups containing at least one attribute of same said attribute type;

associate each of said type groups with a corresponding type size; and

sort said type groups in an descending order based on the value of said corresponding type size.

9. (Original) The medium of claim 8, wherein said information recorded on said medium further causes said computer to:

determine said corresponding type size for a type group; and

assign said corresponding type size to said type group.

10. (Original) The medium of claim 9, wherein said information recorded on said medium further causes said computer to:

obtain said corresponding type size from a set of pre-defined primitive type sizes if the attribute type of said type group is a primitive type;

extract a plurality of internal attribute specifications from said type group if the attribute type of said type group is a non-primitive type, each of said internal attribute specifications including an attribute name and an attribute type; and

Appl. No. 09/749,609

Response Dated October 13, 2004

Reply to Office Action of August 14, 2003

generate a permutation of said plurality of internal attribute specifications; and

compute said corresponding type size of said type group by counting the total number of bytes occupied by said permutation of said plurality of internal attribute specifications.